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EXAMINER	
MATTIS, JASON E	

ART UNIT	PAPER NUMBER
2665	

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9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/898,825	CHO, SUNG BUM	
	Examiner	Art Unit	
	Jason E Mattis	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *5-10 and 14-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *5-10 and 16-27* is/are rejected.

7)☒ Claim(s) *14 and 15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to Applicant's amendment A filed on 2/17/04. Claims 1-4 and claims 11-13 are cancelled. New claims 16-27 have been added.

Drawings

2. The drawings were received on 2/17/04. These drawings are acceptable.

Claim Objections

3. Claims 14 and 15 are object to due to the following informality. Both claims 14 and 15 fail to define what the term "a HDD module" stands for.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 5-10 and 16-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Kalmanek, Jr. et al. (U.S. Pat. 6574335).

With respect to claim 5, Kalmanek et al. discloses a method for operating an Internet telephony gateway, telephone network gateway 130 **(See column 4 lines 27-46 and item 130 in Figure 1 of Kalmanek et al. for reference to operating a gateway, which interfaces conventional telephones to telephones using a packet data network)**. Kalmanek et al. also discloses accessing a call between a terminal unit for a public switched telephone network, telephone 192, and a terminal unit for an Internet protocol network, telephone 190 **(See column 65 line 53 to column 66 line 67, items 190 and 192 in Figure 1, and Figures 9 and 10 of Kalmanek et al. for reference to call flows, which are used to connect a call between a user of a data communications network, telephone 190, to a user of a PSTN, telephone 192)**. Kalmanek et al. further discloses respectively monitoring the states of the PSTN and the IP network through a board for the PSTN and a board for the IP network **(See column 4 lines 66 to column 5 line 14, column 6 lines 45-58, and items 110 and 111 in Figure 1 of Kalmanek et al. for reference to gateway controllers 110 and 111 managing call state information of the communication network 100 and the telephone network 135 by passing state information to devices, which are connected to telephones 190, 191, and 192)**. Kalmanek et al. also discloses generating an alarm in the board for the PSTN, gateway controller 111, when any failure occurs in the PSTN **(See column 39 line 9 to column 61 line 32 of Kalmanek et al.**

for reference to alarms generated by the gateway controllers of the system due to PSTN and IP network errors such as: setup errors, redirect errors, splice errors, trace errors, transfer errors, reserve errors, commit errors, recommit errors, hold errors, keepalive messages, and hangup messages). Kalmanek et al. further discloses terminating the call with the terminal unit for the IP network, telephone 190, in response to the error messages **(See column 65 lines 39-52, column 67 lines 10-14 and Figure 12 of Kalmanek et al. for reference to error conditions initiating the call termination process and for reference to the call termination process performed to terminate the call for telephone 190 connected to packet communication network 100, Figure 12).** The process for terminating the call in Figure 12 of Kalmanek et al. inherently includes blocking a channel between the Internet telephony gateway, telephone network gateway 130, and the PSTN because in terminating the call, the gateway releases call connections, which blocks the channel between the communication network 100 and the telephone network 135 **(See Figure 12 of Kalmanek et al. for reference to release gate connections during a call termination process, which inherently blocks the channel between the communication network 100 and the telephone network 135).**

With respect to claim 6, Kalmanek et al. discloses a step of providing a sound, a terminating announcement, for informing the terminal unit for the IP network, telephone 190, of termination of the call **(See column 67 lines 36-54 of Kalmanek et al. for reference to sending a terminating announcement to a customer when a call connection fails).**

With respect to claim 7, Kalmanek et al. discloses the sound, terminating announcement, including a termination message, a tone, and an announcement **(See column 67 lines 36-54 of Kalmanek et al. for reference to the terminating announcement including common messages such as "the number you have dialed is not is not in service...", which is a termination message and announcement and also for reference to terminating announcements including a "trunk busy" signal, which is a tone)**.

With respect to claim 8, Kalmanek et al. discloses a method for operating an Internet telephony gateway, telephone network gateway 130 **(See column 4 lines 27-46 and item 130 in Figure 1 of Kalmanek et al. for reference to operating a gateway, which interfaces conventional telephones to telephones using a packet data network)**. Kalmanek et al. also discloses accessing a call between a terminal unit for a public switched telephone network, telephone 192, and a terminal unit for an Internet protocol network, telephone 190 **(See column 65 line 53 to column 66 line 67, items 190 and 192 in Figure 1, and Figures 9 and 10 of Kalmanek et al. for reference to call flows, which are used to connect a call between a user of a data communications network, telephone 190, to a user of a PSTN, telephone 192)**. Kalmanek et al. further discloses respectively monitoring the states of the PSTN and the IP network through a board for the PSTN and a board for the IP network **(See column 4 lines 66 to column 5 line 14, column 6 lines 45-58, and items 110 and 111 in Figure 1 of Kalmanek et al. for reference to gateway controllers 110 and 111 managing call state**

information of the communication network 100 and the telephone network 135 by passing state information to devices, which are connected to telephones 190, 191, and 192). Kalmanek et al. also discloses generating an alarm in the board for the IP network, gateway controller 111, when any failure occurs in the IP network **(See column 39 line 9 to column 61 line 32 of Kalmanek et al. for reference to alarms generated by the gateway controllers of the system due to PSTN and IP network errors such as: setup errors, redirect errors, splice errors, trace errors, transfer errors, reserve errors, commit errors, recommit errors, hold errors, keepalive messages, and hangup messages)**. Kalmanek et al. further discloses terminating the call with the terminal unit for the PSTN, telephone 192, in response to the error messages **(See column 65 lines 39-52, column 67 lines 1-9 and Figure 11 of Kalmanek et al. for reference to error conditions initiating the call termination process and for reference to the call termination process performed to terminate the call for telephone 192 connected to telephone network 135, Figure 11)**. The process for terminating the call in Figure 11 of Kalmanek et al. inherently includes blocking a channel between the Internet telephony gateway, telephone network gateway 130, and the PSTN because in terminating the call, the gateway releases call connections, which blocks the channel between the communication network 100 and the telephone network 135 **(See Figure 11 of Kalmanek et al. for reference to release gate connections during a call termination process, which inherently blocks the channel between the communication network 100 and the telephone network 135)**.

With respect to claim 9, Kalmanek et al. discloses a step of providing a sound, a terminating announcement, for informing the terminal unit for the PSTN, telephone 192, of termination of the call **(See column 67 lines 36-54 of Kalmanek et al. for reference to sending a terminating announcement to a customer when a call connection fails)**.

With respect to claim 10, Kalmanek et al. discloses the sound, terminating announcement, including a termination message, a tone, and an announcement **(See column 67 lines 36-54 of Kalmanek et al. for reference to the terminating announcement including common messages such as "the number you have dialed is not is not in service...", which is a termination message and announcement and also for reference to terminating announcements including a "trunk busy" signal, which is a tone)**.

With respect to claim 16, Kalmanek et al. discloses a network-based telephony method providing a plurality of call signaling channels between a public switched telephone network, telephone network 135, and an Internet protocol network, communication network 100 **(See column 4 lines 15-26 and Figure 1 of Kalmanek et al. for reference to end-to-end signaling between communication devices, which includes signaling between telephone network 135 and communication network 100)**. Kalmanek et al. also discloses managing the state of call signaling channels between the PSTN, telephone network 135, and the IPN network, communication network 100, by way of a call control monitor, gate controllers 110 and 111 **(See column 4 lines**

66 to column 5 line 14, column 6 lines 45-58, and items 110 and 111 in Figure 1 of Kalmanek et al. for reference to gateway controllers 110 and 111 managing call state information of the communication network 100 and the telephone network 135 by passing state information to devices, which are connected to telephones 190, 191, and 192). Kalmanek et al. further discloses reporting IPN call signaling channel failures to the call control module, gateway controller 111 **(See column 39 line 9 to column 61 line 32 of Kalmanek et al. for reference to reporting PSTN and IP network signaling errors such as: setup errors, redirect errors, splice errors, trace errors, transfer errors, reserve errors, commit errors, recommit errors, hold errors, keepalive messages, and hangup messages)**. Kalmanek et al. further discloses terminating the call with the terminal unit for the PSTN, telephone 192, in response to the error messages **(See column 65 lines 39-52, column 67 lines 1-9 and Figure 11 of Kalmanek et al. for reference to error conditions initiating the call termination process and for reference to the call termination process performed to terminate the call for telephone 192 connected to telephone network 135, Figure 11)**. The process for terminating the call in Figure 11 of Kalmanek et al. inherently includes blocking a channel between the Internet telephony gateway, telephone network gateway 130, and the PSTN because in terminating the call, the gateway releases call connections, which blocks the channel between the communication network 100 and the telephone network 135 **(See Figure 11 of Kalmanek et al. for reference to release gate connections during a call termination process, which**

inherently blocks the channel between the communication network 100 and the telephone network 135).

With respect to claim 17, Kalmanek et al. discloses a step of providing a terminal unit, telephone 192, connected to the PSTN, telephone network 135, with an indication of termination of the call **(See column 67 lines 36-54 of Kalmanek et al. for reference to sending a terminating announcement to a customer when a call connection fails).**

With respect to claim 18, Kalmanek et al. discloses the call termination indication including a termination message **(See column 67 lines 36-54 of Kalmanek et al. for reference to the terminating announcement including a message such as "the number you have dialed is not in service...").**

With respect to claim 19, Kalmanek et al. discloses the call termination indication including a tone **(See column 67 lines 36-54 of Kalmanek et al. for reference to the terminating announcement including a "trunk busy" signal, which is a tone).**

With respect to claim 20, Kalmanek et al. discloses a network-based telephony method providing a plurality of call signaling channels between a public switched telephone network, telephone network 135, and an Internet protocol network, communication network 100 **(See column 4 lines 15-26 and Figure 1 of Kalmanek et al. for reference to end-to-end signaling between communication devices, which includes signaling between telephone network 135 and communication network 100).** Kalmanek et al. also discloses managing the state of call signaling channels between the PSTN,

telephone network 135, and the IPN network, communication network 100, by way of a call control monitor, gate controllers 110 and 111 **(See column 4 lines 66 to column 5 line 14, column 6 lines 45-58, and items 110 and 111 in Figure 1 of Kalmanek et al. for reference to gateway controllers 110 and 111 managing call state information of the communication network 100 and the telephone network 135 by passing state information to devices, which are connected to telephones 190, 191, and 192)**. Kalmanek et al. further discloses reporting PSTN call signaling channel failures to the call control module, gateway controller 111 **(See column 39 line 9 to column 61 line 32 of Kalmanek et al. for reference to reporting PSTN and IP network signaling errors such as: setup errors, redirect errors, splice errors, trace errors, transfer errors, reserve errors, commit errors, recommit errors, hold errors, keepalive messages, and hangup messages)**. Kalmanek et al. further discloses terminating the call with the terminal unit for the IP network, telephone 190, in response to the error messages **(See column 65 lines 39-52, column 67 lines 10-14 and Figure 12 of Kalmanek et al. for reference to error conditions initiating the call termination process and for reference to the call termination process performed to terminate the call for telephone 190 connected to packet communication network 100, Figure 12)**. The process for terminating the call in Figure 12 of Kalmanek et al. inherently includes blocking a channel between the Internet telephony gateway, telephone network gateway 130, and the PSTN because in terminating the call, the gateway releases call connections, which blocks the channel between the communication

network 100 and the telephone network 135 **(See Figure 12 of Kalmanek et al. for reference to release gate connections during a call termination process, which inherently blocks the channel between the communication network 100 and the telephone network 135)**.

With respect to claim 21, Kalmanek et al. discloses a step of providing a terminal unit, telephone 192, connected to the IPN, communication network 100, with an indication of termination of the call **(See column 67 lines 36-54 of Kalmanek et al. for reference to sending a terminating announcement to a customer when a call connection fails)**.

With respect to claim 22, Kalmanek et al. discloses the call termination indication including a termination message **(See column 67 lines 36-54 of Kalmanek et al. for reference to the terminating announcement including a message such as "the number you have dialed is not in service...")**.

With respect to claim 23, Kalmanek et al. discloses the call termination indication including a tone **(See column 67 lines 36-54 of Kalmanek et al. for reference to the terminating announcement including a "trunk busy" signal, which is a tone)**.

With respect to claim 24, Kalmanek et al. discloses the call termination indication including an announcement **(See column 67 lines 36-54 of Kalmanek et al. for reference to the terminating announcement including an announcement such as "the number you have dialed is not in service...")**.

With respect to claim 25, Kalmanek et al. discloses a network-based telephony gateway **(See column 4 line 66 to column 5 line 14 and Figure 1 of**

Kalmanek et al. for reference to telephone network gateway 130). Kalmanek et al. also discloses the gateway devices including at least one call control module, gateway controllers 110 and 111 **(See column 4 line 66 to column 5 line 14 and Figure 1 of Kalmanek et al. for reference to gateway controllers 110 and 111)**. Kalmanek et al. further discloses a public switched telephone network interface, telephone 192, coupled between the control modules, gateway controllers 110 and 111, and a PSTN, telephone network 135 **(See column 4 line 66 to column 5 line 14 and Figure 1 of Kalmanek et al. for reference to telephone 192 coupled to PSTN 135 and telephone network gateway 130, which is controlled by gateway controllers 110 and 111)**. Kalmanek et al. also discloses an Internet protocol network interface, telephones 190 and 191, coupled between the control modules, gateway controllers 110 and 111, and an IPN, communication network 100 **(See column 4 line 66 to column 5 line 14 and Figure 1 of Kalmanek et al. for reference to telephones 190 and 191 coupled through communication network 100 to gateway controllers 110 and 111)**. Kalmanek et al. further discloses a means for exchanging data between the PSTN interface, telephone 192, and the IPN interface, telephones 190 and 191 **(See column 65 line 53 to column 66 line 67, items 190 and 192 in Figure 1, and Figures 9 and 10 of Kalmanek et al. for reference to call flows, which are used to exchange between a user of a data communications network, telephone 190, to a user of a PSTN, telephone 192)**. Kalmanek et al. also discloses a call control module managing the states of call signaling channels between the PSTN and IPN **(See column 4 lines 66 to**

column 5 line 14, column 6 lines 45-58, and items 110 and 111 in Figure 1 of Kalmanek et al. for reference to gateway controllers 110 and 111 managing call state information of the communication network 100 and the telephone network 135 by passing state information to devices, which are connected to telephones 190, 191, and 192). Kalmanek et al. further discloses reporting PSTN call signaling channel failures to the call control module, gateway controller 111 **(See column 39 line 9 to column 61 line 32 of Kalmanek et al. for reference to reporting PSTN and IP network signaling errors such as: setup errors, redirect errors, splice errors, trace errors, transfer errors, reserve errors, commit errors, recommit errors, hold errors, keepalive messages, and hangup messages)**. Kalmanek et al. further discloses reporting IPN call signaling channel failures to the call control module, gateway controller 111 **(See column 39 line 9 to column 61 line 32 of Kalmanek et al. for reference to reporting PSTN and IP network signaling errors such as: setup errors, redirect errors, splice errors, trace errors, transfer errors, reserve errors, commit errors, recommit errors, hold errors, keepalive messages, and hangup messages)**. Kalmanek et al. further discloses terminating the call with the terminal unit for the IP network, telephone 190, in response to the error messages **(See column 65 lines 39-52, column 67 lines 10-14 and Figure 12 of Kalmanek et al. for reference to error conditions initiating the call termination process and for reference to the call termination process performed to terminate the call for telephone 190 connected to packet communication network 100, Figure 12)**. The process

for terminating the call in Figure 12 of Kalmanek et al. inherently includes blocking a channel between the Internet telephony gateway, telephone network gateway 130, and the PSTN because in terminating the call, the gateway releases call connections, which blocks the channel between the communication network 100 and the telephone network 135 **(See Figure 12 of Kalmanek et al. for reference to release gate connections during a call termination process, which inherently blocks the channel between the communication network 100 and the telephone network 135)**. Kalmanek et al. further discloses terminating the call with the terminal unit for the PSTN, telephone 192, in response to the error messages **(See column 65 lines 39-52, column 67 lines 1-9 and Figure 11 of Kalmanek et al. for reference to error conditions initiating the call termination process and for reference to the call termination process performed to terminate the call for telephone 192 connected to telephone network 135, Figure 11)**. The process for terminating the call in Figure 11 of Kalmanek et al. inherently includes blocking a channel between the Internet telephony gateway, telephone network gateway 130, and the PSTN because in terminating the call, the gateway releases call connections, which blocks the channel between the communication network 100 and the telephone network 135 **(See Figure 11 of Kalmanek et al. for reference to release gate connections during a call termination process, which inherently blocks the channel between the communication network 100 and the telephone network 135)**.

With respect to claim 26, Kalmanek et al. discloses gate controllers 110 and 111, which performs the functions of both a call maintenance module and a call processor module with the maintenance module adapted to provide call signaling channel maintenance data to the call processor module and a call processor module adapted to periodically update the state of call signaling channels between the PSTN and IPN according to signaling received from the maintenance module **(See column 6 lines 45-58 of Kalmanek et al. for reference to the gate controllers 110 and 111 using received data to updating call signaling states)**.

With respect to claim 27, Kalmanek et al. discloses the state of call signaling channels including an idle state **(See column 52 lines 33-34 for reference to a reserved state, which acts as an idle state)**, a conversation busy state **(See column 41 lines 43-48 for reference to a busy error)**, a block state **(See column 63 lines 28-35 for reference to blocking a call setup process)**, and a not assign state **(See column 40 lines 37-44 for reference to a call hold state, which acts as a not assign state)**.

Allowable Subject Matter

6. Claims 14 and 15 are objected to but would be allowed if rewritten to overcome the objections.

7. Claims 14 and 15 are allowable over the prior art of record since the cited references taken individually or in combination fail to particularly disclose a first parallel-to-serial converter converting alarm data of a HDD module to serial data;

a second parallel to serial converter converting parallel input state data of a fan and cables to serial data; a serial-to-parallel converter converting the data from the first and second parallel-to-serial converters to parallel data and adding the parallel data to state data of ejection, injection, and operation of boards, input in parallel from the PBA. It is noted that the closest prior art, Kalmanek et al. discloses a monitoring and call termination method and system for use with Internet protocol telephony. However, Kalmanek et al. fails to disclose the structure of the device as claimed in the underlined section above.

Response to Arguments

8. Applicant's arguments with respect to claims 5-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason E Mattis whose telephone number is (703) 305-8702. The examiner can normally be reached on M-F 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (703) 305-4798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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RICKY NGO
PRIMARY EXAMINER